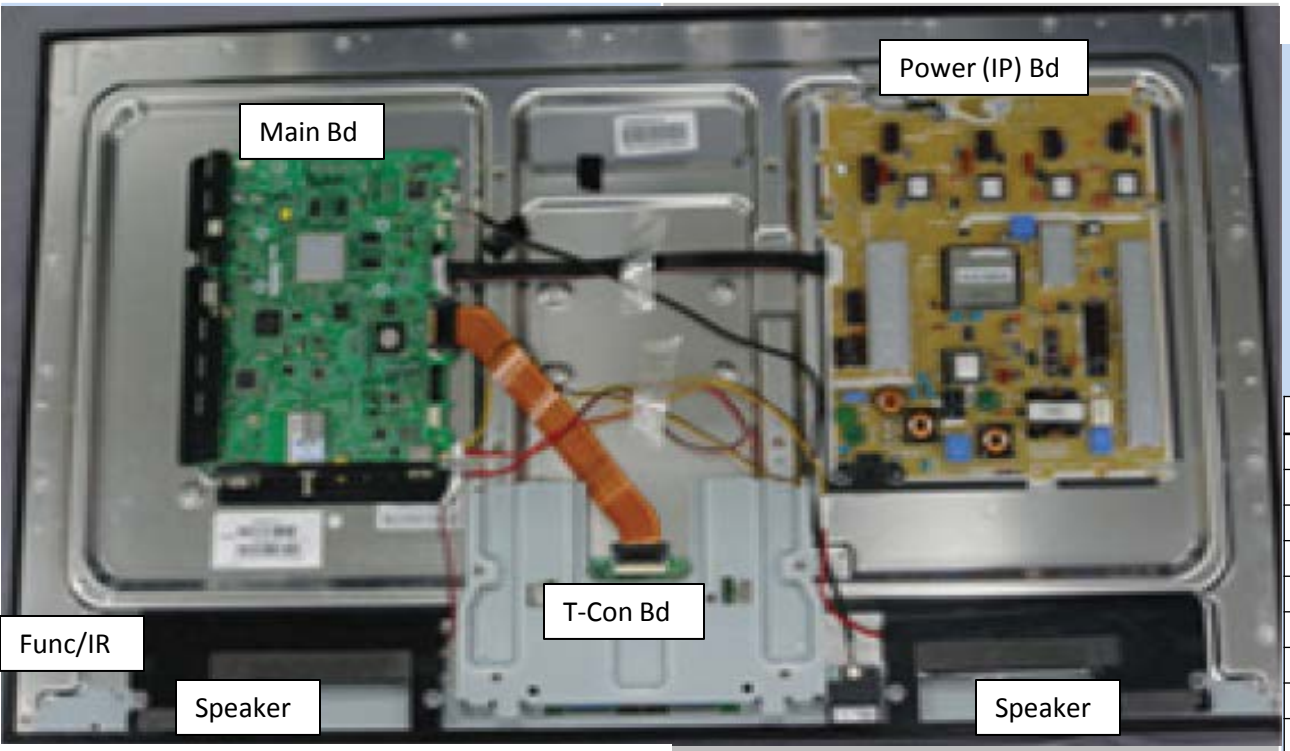


Publication #: APUN46D6900W Rev. Date: 6/4/12

Service Bulletins:

➢ ***46" LED Panel Substitution*** - Parts Bulletin GPC20120126001. When panel BN95-00450A is ordered and substitute panel BN07-00998A is being shipped, LVDS cable BN96-18130D** should also be ordered. Original LVDS cable is not long enough to reach the T-Con board.

Quick Part List:

Version	Parts No	Short Description
ALL	BN44-00427B	Power PCB
CN01	BN81-06343A	T-CON PCB
CN01	BN94-04629C	Main PCB
H302	BN94-04629G	Main PCB
H302	BN96-16503A	T-CON PCB
CN01	BN96-17107B	Bluetooth Module
CN01	BN96-18099A	3D & IR PCB
ALL	BN96-18099D	IR PCB
CN01	BN96-18232B	Function PCB
CN01	BN07-00998A	Panel
H302	BN95-00450A	Panel
ALL	BN96-16722B	Stand Guide
ALL	BN96-16876A	Rear Cover
ALL	BN96-16900K	Middle Cover
CN01	BN96-18195A	Stand Guide Neck
CN01	BN96-18953C	Stand Base
ALL	BN59-01134B	Remote
ALL	BN96-16798B	Speaker
CN01	BN96-18130C	LVDS Cable
H302	BN96-18130J	LVDS Cable
All	BN96-18130D	** **Longer** LVDS Cable
ALL	3903-000598	Power Cord
CN01	AA59-00441A	Remote
ALL	BN63-02368B	Cleaning Cloth

HELP: 1-888-751-4086 (Tech Sup. – ASC/SSD)
1-866-894-0637 (Tech Sup. - FE/ME)

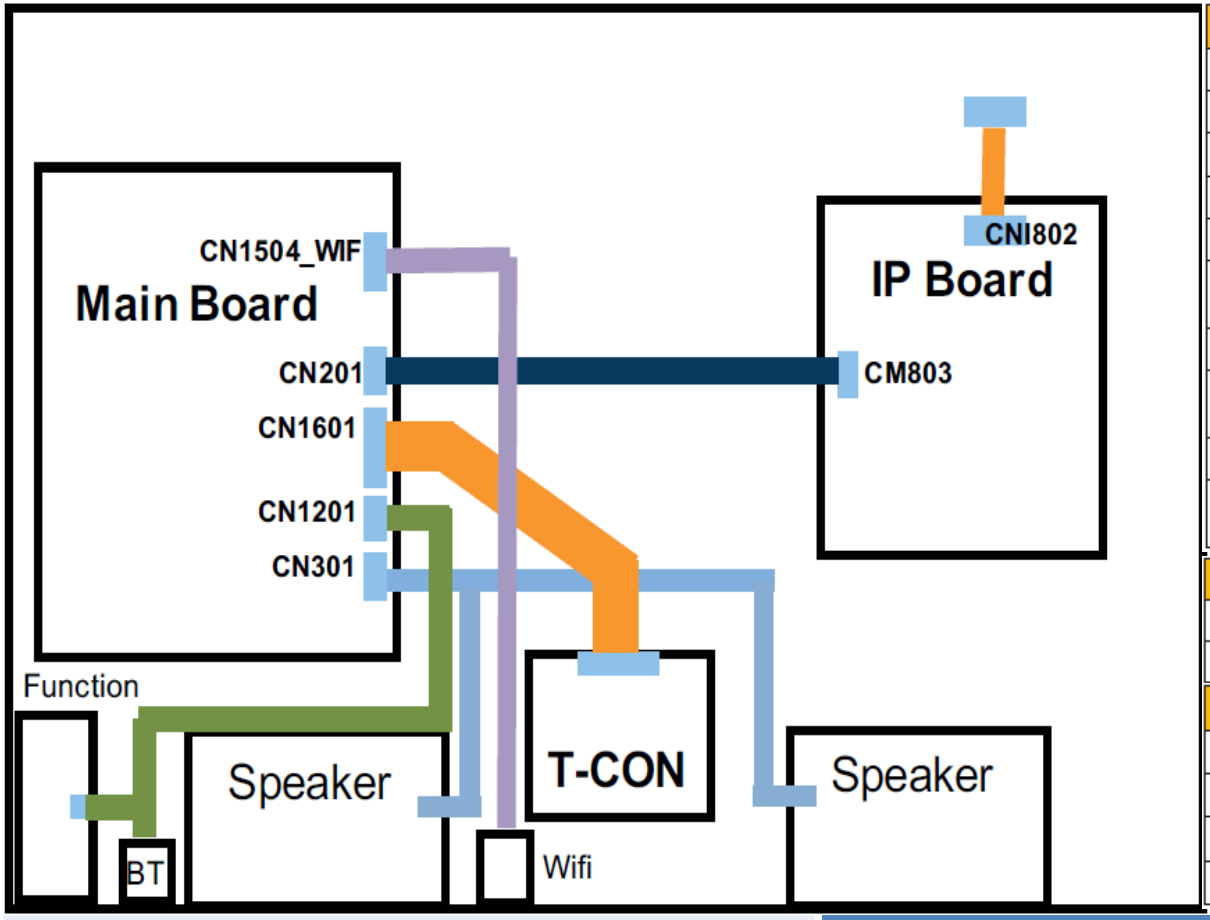
GSPN
http://service.samsungportal.com/EP/web/portal/jsp/EP_Default1.jsp

PLUS ONE
http://my.plus1solutions.net/clientPortals/samsung

HOT TIPS
Power On Problems: (see **page 3**)
Video Problems: (see **page 4)**

FIRMWARE

• LED TV for D6300/D6900 T-GASFAKUC 1020.2
Description - This firmware can be available Amazon app.
- Enhances firmware security
- This firmware will decrease flickering problem on 3D mode. (only 3D model)
- Change the way to get out of Store Demo Mode
- Change the type of information of Info banner
- Prevent escaping issue when pressing volume button on video apps(Netflix, Vudu, etc)
- Support Remote Service
- For netflix 3.1 service.



CN201(to Power Board)			
1	B5V_PW	11	B13V_PW
2	SW_POWER	12	B13V_PW
3	B5V_PW	13	B13V_PW
4	A5V_PW	14	PWM_DIMMING
5	GND	15	GND
6	GND	16	PWM_DIMMING_CPLD2
7	B18VS_PW	17	OVD_ON
8	GND	18	PWM_DIMMING_CPLD3
9	B18VS_PW	19	OVD_LEVEL
10	SW_INVERTER	20	PWM_DIMMING_CPLD4

CN301(to Speaker)			
1	R+	3	L+
2	R-	4	L-

CN401(to Function/IR)			
1	IR	5	MSDA_A5V
2	GND	6	WAKE
3	A3.3V_PW	7	LED_STB
4	MSCL_A5V	8	NC

Power On Sequence:

1. Standby Voltage, (CNM803, #4, 5v)
2. Power On, (CNM803,#2, 0-3.5v)
3. Low Voltage Supplies On, (B5v, 18v, & 13v)
4. High Voltage Supplies On, (CNM803, #10, SW_Inverter)
5. Back Light "On" Confirmation

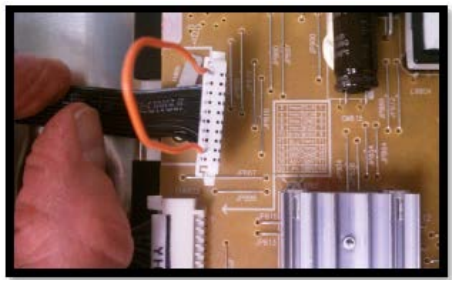
To "Force-On" Back (Edge)Lights – See procedure on next page.

Activating the Back Light

Unlike other 2011 LED Edge/Back lit models, removing the power cable from the main board and applying AC power to the SMPS will not automatically turn on the LED back lights. Due to the Pulse Width Modulation of the "negative" signal line, some additional steps are required. See instructions and pictures below. *(Sample unit pictured has a confirmed good working SMPS).*

1. Remove AC power cord.
2. Disconnect power cable from Main PCB, CN201 (SMPS, CNM802 to Main PCB, CN201). Notice connector cable is double layered with odd number pins on the top and even numbered pins on the bottom.
3. On the disconnected cable end, insert a jumper wire between pin 18 (A5V) and pin 2 (PWM4). {See Pic. A.}
4. Reconnect AC power cord and apply AC power.
5. Confirm via that the lower left & right LED sight holes are illuminating brightly indicating the lower 1/4th of the panel edge LED lights are working correctly. {Left side shown in Pic. B.}

A.



B.

This process is repeated for the rest of the PWM signals (PWM1, PWM2 and PWM3) in connector cable pins 4, 6, and 8 respectively. Shorting each to A5V should illuminate the next 1/4th of the panel (going bottom to top) edge LED lights and can be verified by looking at the appropriate LED sight holes. See additional pictures below:

C.

D.

E.

TROUBLESHOOTING VIDEO PROBLEMS

2011 LED 8000 Series

1. Verify Video Operation

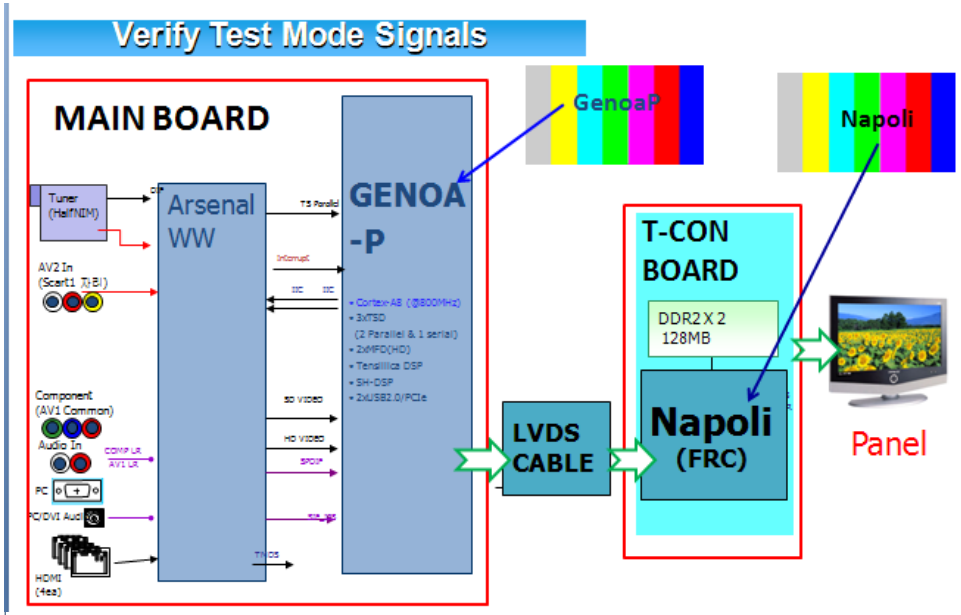
a. **Customer Picture Test** (models available)
b. **"Display"** (If display is OK source is suspected)
C. Substitute with known good Source
(**external DVD or Signal Generator**)

2. Using Test Patterns in Service Mode

- ENTER SERVICE MODE –

1. Select an active source signal. (HDMI preferred)
Test Pattern may rely on signal source to appear.

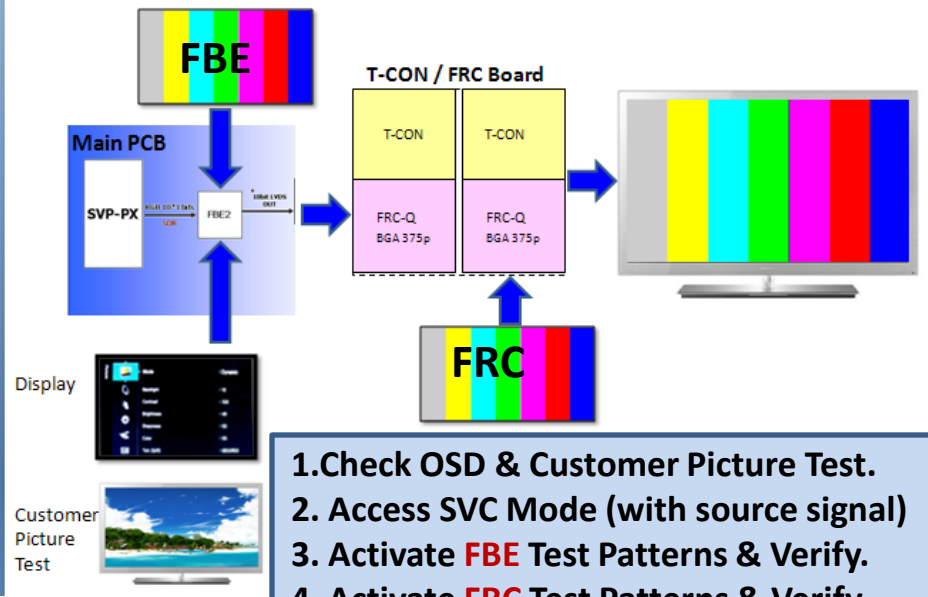
Customer Remote	Service Remote
2. Power off	2. Power On
3. Mute, 182, Power	3. Info, Test



1. **Select an active source signal. (HDMI preferred)**
Test Pattern may rely on signal source to appear.
2. **Access Service Mode**
3. **Access SVC**
4. **Access Test Patterns**
5. **Access Genoa-P**
6. **Check Test Patterns**
7. **If OK suspect input Source**
8. **Access Napoli**
9. **Check Test Patterns**
10. **If OK and Genoa-P was not good**
Suspect Main Board or LVDS Cable

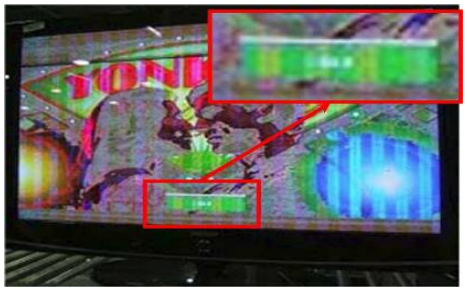
2010 Models

LCD Signal Path for Troubleshooting



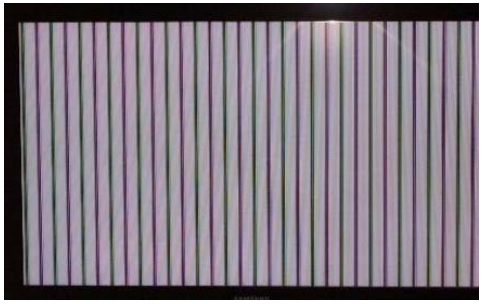
1.Check OSD & Customer Picture Test.
2. Access SVC Mode (with source signal)
3. Activate FBE Test Patterns & Verify.
4. Activate FRC Test Patterns & Verify.

ON SCREEN FAILURE EXAMPLES:



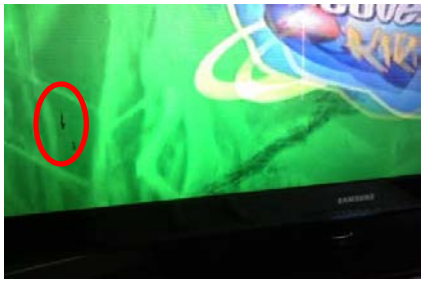
If Picture & Display errors Defective Main Board, LVDS, or T-CON

Green lines or a green screen defective main board , LVDS , or T-CON.



Vertical or Horizontal Lines :Defective Panel likely but also T-CON, LVDS, or Main Board. Use Test Patterns in Factory Service Mode to determine error)

De-lamination: PANEL FAILURE



ALIGNMENTS:

1. Check/Set Option Bytes:

Model Code	UN46D6900						
Side Label	Type	Model	Tuner	Light Effect	Ch Table	Country	Front Color
CN01	46P1UF6E	UD6900	SEC_Si2173	OFF	-	US	U-T-CL-M
H301	46P1UF7E	UD6900	SEC_Si2173	OFF	-	US	U-T-CL-M

2. Check/Perform Firmware Upgrade for all repairs.

3. Perform reset in Service Mode & Plug and Play if Main board is replaced.

SPECIAL NOTES:

Inform customer of reset of all Settings if Main Board or Panel is replaced.